

| | Type | Hits |
|-----------|-----------------|-------------|
| 1 | BRS | 0 |
| 2 | BRS | 1 |
| 3 | BRS | 4 |
| 4 | BRS | 0 |
| 5 | BRS | 0 |
| 6 | BRS | 0 |
| 7 | BRS | 214 |
| 8 | BRS | 6 |
| 9 | BRS | 10 |
| 10 | BRS | 6 |
| 11 | BRS | 10 |
| 12 | BRS | 0 |
| 13 | BRS | 3 |
| 14 | BRS | 12 |
| 15 | BRS | 3011 |
| 16 | BRS | 69 |
| 17 | IS&R | 1 |
| 18 | IS&R | 1 |

| | Search Text |
|-----------|---|
| 1 | ((("Hfo.sub.2" near2 "Ta.sub.2 O.sub.5") with (alloy or solution)) same (gate with (dielectric or insulat\$5)) |
| 2 | ((("Hfo.sub.2" near2 "Ta.sub.2 O.sub.5") with (alloy or solution)) same (dielectric or insulat\$5) |
| 3 | ("Hfo.sub.2" near2 "Ta.sub.2 O.sub.5") with (alloy or solution) |
| 4 | "HfO.sub.2.sub.u" |
| 5 | "(HfO.sub.2).sub.u" |
| 6 | "(HfO.sub.2).sub.\$3" |
| 7 | ("Hfo.sub.2" near3 "Ta.sub.2 O.sub.5") |
| 8 | ((("Hfo.sub.2" near3 "Ta.sub.2 O.sub.5")) same (gate with (dielectric or insulat\$5)) |
| 9 | ("Hfo.sub.2" near3 "Ta.sub.2 O.sub.5") near4 (solution or mixture or combination) |
| 10 | ((("Hfo.sub.2" near3 "Ta.sub.2 O.sub.5")) same (gate with (dielectric or insulat\$5))) same (gate with (dielectric or insulat\$5)) |
| 11 | ((("Hfo.sub.2" near3 "Ta.sub.2 O.sub.5") near4 (solution or mixture or combination)) not (((("Hfo.sub.2" near3 "Ta.sub.2 O.sub.5")) same (gate with (dielectric or insulat\$5))) same (gate with (dielectric or insulat\$5))) |
| 12 | ((("Hfo.sub.2" near3 "Ta.sub.2 O.sub.5") near4 (solution or mixture or combination)) same (gate with (dielectric or insulat\$5)) |
| 13 | ((("Hfo.sub.2" near3 "Ta.sub.2 O.sub.5") near4 (solution or mixture or combination)) same (dielectric or insulat\$5) |
| 14 | ("3731163" "4670355" "4734340" "5091763" "5189503" "5292673" "5316977" "5596214" "5677015" "5688724" "5702972" "6107656").PN. |
| 15 | silicide near4 (source or drain) |
| 16 | S1 same ("ILD" or (interlevel near2 dielectric)) |
| 17 | ("5292673").PN. |
| 18 | ("6087238").PN. |

| | DBs | Time Stamp |
|-----------|---------------------|-------------------------|
| 1 | USPAT | 2002/08/22 21:43 |
| 2 | USPAT | 2002/08/22 21:36 |
| 3 | USPAT | 2002/08/22 21:42 |
| 4 | USPAT | 2002/08/22 21:42 |
| 5 | USPAT | 2002/08/22 21:42 |
| 6 | USPAT | 2002/08/22 21:42 |
| 7 | USPAT | 2002/08/22 21:51 |
| 8 | USPAT | 2005/01/06 18:41 |
| 9 | USPAT | 2002/08/22 21:54 |
| 10 | USPAT | 2002/08/22 21:55 |
| 11 | USPAT | 2002/08/22 21:54 |
| 12 | USPAT | 2002/08/22 21:55 |
| 13 | USPAT | 2002/08/22 21:55 |
| 14 | USPAT | 2004/09/06 16:17 |
| 15 | USPAT | 2004/09/07 11:48 |
| 16 | USPAT | 2004/09/07 11:50 |
| 17 | USPAT; USOCR | 2004/09/07 12:41 |
| 18 | USPAT | 2005/01/06 17:55 |

| | Type | Hits |
|-----------|-----------------|--------------|
| 19 | BRS | 462 |
| 20 | BRS | 67 |
| 21 | BRS | 13 |
| 22 | BRS | 14 |
| 23 | IS&R | 1 |
| 24 | BRS | 699 |
| 25 | BRS | 8 |
| 26 | BRS | 19294 |
| 27 | BRS | 23203 |
| 28 | IS&R | 67603 |
| 29 | BRS | 3386 |
| 30 | BRS | 128 |
| 31 | BRS | 290 |
| 32 | BRS | 1 |
| 33 | BRS | 14 |
| 34 | BRS | 0 |
| 35 | BRS | 217 |
| 36 | BRS | 1 |
| 37 | BRS | 8 |
| 38 | BRS | 2615 |

| | Search Text |
|----|---|
| 19 | ("Ta.sub.2 O.sub.5" or (tantalum near2 (pent adj2 oxide))) with (gate with (dielectric or insulat\$5)) |
| 20 | S19 same (interfacial or barrier) |
| 21 | S19 with (interfacial or barrier) |
| 22 | ("3731163" "4670355" "4734340" "5091763" "5189503" "5292673" "5596214" "5677015" "5688724" "5702972" "5880508" "6027976" "6037205" "6107656").PN. |
| 23 | ("5880508").PN. |
| 24 | (gate near2 width) with (channel near2 length) |
| 25 | ("4610078").URPN. |
| 26 | (dual or double or second) near4 spacer |
| 27 | (dual or double or second) near4 spacer\$1 |
| 28 | ("438").CLAS. |
| 29 | S27 and S28 |
| 30 | (interfacial or (inter adj2 facial)) with (high near3 (dielectric or k)) |
| 31 | (interfacial or (inter adj2 facial)) with (high near3 (dielectric or k)) |
| 32 | S30 and S27 |
| 33 | ("3731163" "4670355" "4734340" "5091763" "5189503" "5292673" "5596214" "5677015" "5688724" "5702972" "5880508" "6027976" "6037205" "6107656").PN. |
| 34 | ("6727148").URPN. |
| 35 | (interfacial or (inter adj2 facial)) and S27 |
| 36 | (interfacial or (inter adj2 facial)) same S27 same gate |
| 37 | ("5766991" "5783475" "6150223" "6440875" "6475888" "6506650" "6613624" "6613637").PN. |
| 38 | S27 same gate |

| | DBs | Time Stamp |
|-----------|--|-------------------------|
| 19 | USPAT | 2005/01/06 18:42 |
| 20 | USPAT | 2005/01/06 18:42 |
| 21 | USPAT | 2005/01/06 18:42 |
| 22 | US-PGPUB; USPAT; USOCR | 2005/01/07 12:43 |
| 23 | USPAT | 2005/01/07 12:43 |
| 24 | USPAT | 2005/03/02 10:48 |
| 25 | USPAT | 2005/04/29 11:23 |
| 26 | USPAT; USOCR; EPO; JPO; IBM_TDB | 2005/04/29 11:25 |
| 27 | USPAT; USOCR; EPO; JPO; IBM_TDB | 2005/04/29 11:26 |
| 28 | USPAT | 2005/04/29 11:26 |
| 29 | USPAT | 2005/04/29 11:26 |
| 30 | USPAT | 2005/04/29 11:28 |
| 31 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | 2005/04/29 11:51 |
| 32 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | 2005/04/29 11:41 |
| 33 | US-PGPUB; USPAT; USOCR | 2005/04/29 11:43 |
| 34 | USPAT | 2005/04/29 11:44 |
| 35 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | 2005/04/29 11:50 |
| 36 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | 2005/04/29 11:46 |
| 37 | US-PGPUB; USPAT; USOCR | 2005/04/29 11:47 |
| 38 | USPAT | 2005/04/29 11:50 |

| | Type | Hits |
|-----------|-----------------|---------------|
| 39 | BRS | 1919 |
| 40 | BRS | 67250 |
| 41 | BRS | 28 |
| 42 | BRS | 7 |
| 43 | BRS | 0 |
| 44 | BRS | 15 |
| 45 | BRS | 6 |
| 46 | BRS | 147 |
| 47 | BRS | 163 |
| 48 | BRS | 0 |
| 49 | BRS | 0 |
| 50 | BRS | 3180 |
| 51 | BRS | 0 |
| 52 | BRS | 229022 |
| 53 | BRS | 21 |
| 54 | BRS | 18523 |
| 55 | BRS | 2052 |
| 56 | IS&R | 69144 |
| 57 | IS&R | 134178 |

| | Search Text |
|-----------|--|
| 39 | S38 and S28 |
| 40 | (high near3 (dielectric or k)) |
| 41 | S38 same S40 |
| 42 | ("5439839" "5668065" "5731608" "5976949" "6048738" "6514842" "6587365").PN. |
| 43 | ("6828160").URPN. |
| 44 | ("20010026982" "20020005581" "20020122995" "5286665" "5864160" "5990532" "6087208" "6110790" "6114228" "6180499" "6190981" "6194748" "6207485" "6306715" "6399469").PN. |
| 45 | ("3795976" "4356623" "4462863" "4495219" "4844767" "4992136").PN. |
| 46 | (reoxidation or (re adj2 oxidation)) with (metal near3 oxide) |
| 47 | (leakage near3 current) with (nonuniform\$5 or (non adj2 uniform\$5)) |
| 48 | S46 same S47 |
| 49 | S46 and S47 |
| 50 | (leakage near3 current) and (nonuniform\$5 or (non adj2 uniform\$5)) |
| 51 | S46 and S50 |
| 52 | (leakage near3 current) or (nonuniform\$5 or (non adj2 uniform\$5)) |
| 53 | S46 and S52 |
| 54 | spacer with (glass or "PSG") |
| 55 | S54 same (gate electrode) |
| 56 | ("438").CLAS. |
| 57 | ("257").CLAS. |

| | DBs | Time Stamp |
|-----------|--|-------------------------|
| 39 | USPAT | 2005/04/29 11:50 |
| 40 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | 2005/04/29 11:51 |
| 41 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | 2005/04/29 11:51 |
| 42 | US-PGPUB; USPAT; USOCR | 2005/04/29 12:02 |
| 43 | USPAT | 2005/04/29 12:06 |
| 44 | US-PGPUB; USPAT; USOCR | 2005/04/29 12:07 |
| 45 | US-PGPUB; USPAT; USOCR | 2005/06/17 10:15 |
| 46 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | 2005/06/17 10:40 |
| 47 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | 2005/06/17 10:42 |
| 48 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | 2005/06/17 10:42 |
| 49 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | 2005/06/17 10:42 |
| 50 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | 2005/06/17 10:42 |
| 51 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | 2005/06/17 10:43 |
| 52 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | 2005/06/17 10:42 |
| 53 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | 2005/06/17 10:43 |
| 54 | US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB | 2005/07/27 09:36 |
| 55 | USPAT | 2005/07/27 09:37 |
| 56 | USPAT | 2005/07/27 09:37 |
| 57 | USPAT | 2005/07/27 09:37 |

| | Type | Hits |
|-----------|-------------|---------------|
| 58 | BRS | 147662 |
| 59 | BRS | 376 |

| | Search Text |
|-----------|--------------------|
| 58 | S56 S57 |
| 59 | S55 and S58 |

| | DBs | Time Stamp |
|-----------|--------------|-------------------------|
| 58 | USPAT | 2005/07/27 09:38 |
| 59 | USPAT | 2005/07/27 09:38 |